ECONOMIC FINDING

Science Skepticism Reduces Compliance with COVID-19 Shelter-in-Place Policies

Adam Brzezinski, Vienna University; Valentin Kecht, Bocconi University; David Van Dijcke, University of Michigan; and Austin L. Wright, Assistant Professor, UChicago's Harris School of Public Policy

The proportion of people who stay at home after shelter-in-place policies go into effect is significantly lower in counties with a high concentration of science skeptics.

It follows that if physical distancing reduces interpersonal transmission risks related to the COVID-19 virus, then government policies that mandate physical distancing should slow the spread of COVID-19. Further, local non-compliance with such shelter-in-place orders would create public health risks and could cause regional spread. Given this, it is important that policymakers understand which local factors impact compliance with public health directives.

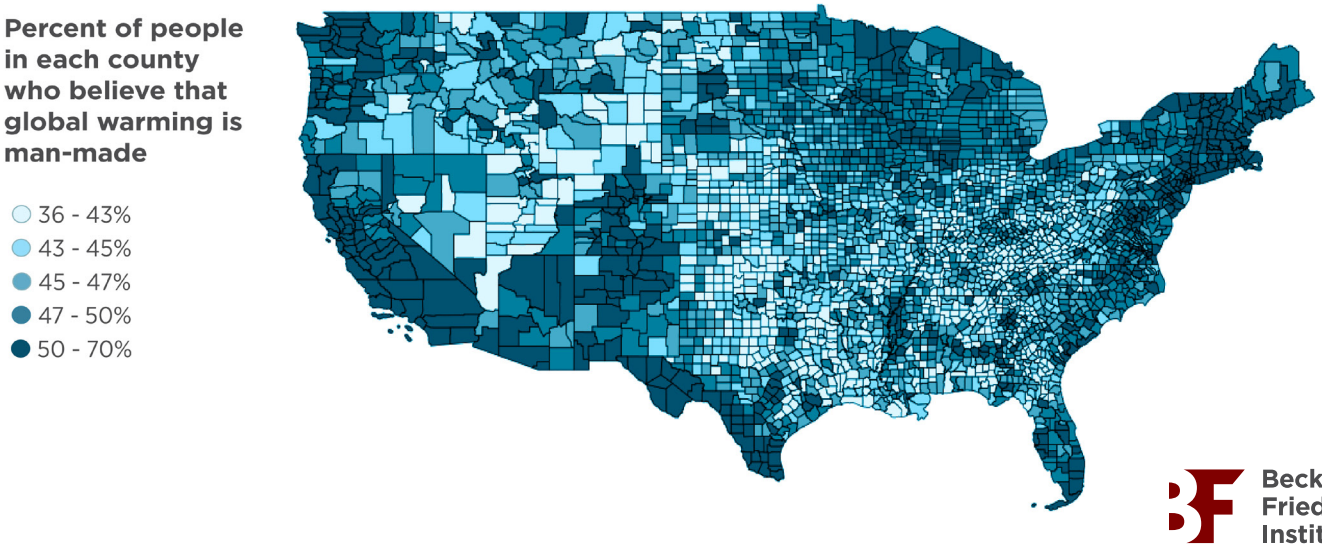
Recent research highlights several factors that influence compliance, including partisanship, political polarization, poverty and economic dislocation, and differences in risk perception, all of which influence physical distancing in the absence of government mandates. This new research highlights the role of science skepticism and attitudes regarding topics of scientific consensus in shaping patterns of physical distancing.

To examine the role of science skepticism, the authors leverage the most granular, representative data on science skepticism in the United States—beliefs about the anthropogenic (human) causes of global warming—to study how physical distancing patterns vary with skepticism toward science. The authors combine this county-level science skepticism measure with location trace data on the movement of around 40 million mobile devices as well as data on state-level shelter-in-place policies, to find the following:

- Science skepticism is likely an important determinant of local compliance with government shelter-in-place policies, even after accounting for the role of partisanship, population density, education, and income, among other factors.
- Shelter-in-place policies increase the proportion of devices that stay at home by 2 p.p. (p-value < 0.001) more in counties with low levels of science skepticism compared to counties with high levels of skepticism. This corresponds to an 8% increase in devices that stayed at home, compared to the February average of 25%.

The authors also benchmark their measure of science skepticism against other measures of belief in science available at the state-level to show that their measure captures a more general notion of skepticism toward topics of scientific consensus.

Figure 1 · Science Skepticism and Physical Distancing: Belief in Man-Made Global Warming



Becker Friedman Institute
FOR ECONOMICS AT UCHICAGO